

REFERENCE TO RELATED APPLICATIONS

7/9/07
This application is a continuation-in-part of U.S. application No. 10/229,325 filed August 26, 2002, ^{now U.S. Patent No. 6,692,147,} which claimed priority from U.S. provisional application No. 60/314,977, filed August 24, 2001. This application also claims the benefit of U.S. provisional application No. 60/516,060 filed October 31, 2003.

TECHNICAL FIELD

This invention relates to venting reclosable bags, and bag closures constructed to enable evacuation of air from closed bags.

BACKGROUND

10 Reclosable bags, such as those employing rib-and-groove type closures, have been known for decades and have become ubiquitous in food packaging. Such zipper-type closures are known to perform reasonably well for sealing bags between uses, and are readily extruded and weldable to various bag film materials.

15 For many applications, it is desirable prolonged exposure of the bag contents to air be avoided, such as to maintain freshness. Such applications include, for example, food storage bags and bags for marketing such food products as coffee, shredded cheese, fruit and lunchmeat, and also bags for storing fertilizers and seeds, sensitive electronic components, and materials that react with air. In such applications, most of the air within the bag may be expelled by collapsing the bag about its contents prior to closing the sealing closure.

SUMMARY

20 This invention features an improvement in bag and bag closure construction that can enable the evacuation of such bags with the closure closed, without undue complexity and cost.

25 According to one aspect of the invention, a vented bag includes a bag body having side walls defining a cavity therebetween for holding material therein and having an opening for accessing the cavity, and a reclosable closure secured to the side walls at the bag opening. The closure has extruded male and female interlocking profiles extending along opposing sides of the opening and constructed to releasably interlock along opposite sides of the male profile, and an